

INDIAN LANGUAGES OF THE PACIFIC STATES AND TERRITORIES.¹

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A few decenniums of research in our newly acquired western dominions have acquainted us with the singular fact that clusters of very numerous, and for the larger part narrowly circumscribed areas of languages exist in these vast and remote regions. In California, and north of it, one stock of language is generally represented by several, sometimes by a large number of dialects and sub-dialects; but there are instances, as in Shasta and in Klamath, where a stock is represented by one idiom only, which never had diverged into dialects, or the sub-dialects of which have become extinct in the course of time. Although certain resemblances between them may be traced in their phonological morphological character, they are totally distinct in their radicals, and by this criterion we are enabled to attempt their classification by stocks or families. Any other than a *genealogical* classification is at present impossible, for we do not possess even the most necessary grammatical data for the majority of the languages spoken along the Pacific coast.

For the western languages, and those of the great Interior Basin, our main sources of information are (and will be for many years to come) vocabularies of one hundred to two hundred terms each. Those obtained and published frequently bear the stamp of dilettantism, sometimes that of profound ignorance of linguistic science on the part of word-collectors, who wholly underrated the great difficulty of taking down a set of disconnected words in a totally unknown and phonetically unwieldy idiom. These word-gatherers would have fared much better, and collected more reliable material, if they had taken short sentences of popular import or texts containing no abstract ideas. For

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an Indian is not accustomed to think of terms incoherent, or words disconnected from others, or of abstract ideas, but uses his words merely as integral parts of a whole sentence, or in connection with others. This is the true cause of the large incorporative power of the American tongues, which in many of them culminates in an extended polysynthetism, and embodies whole sentences in one single verbal form.

At a time when the principal languages and dialects of Asia, Africa and Australasia, the living as well as the extinct, are being investigated with uncommon ardor; myths, popular songs, dirges and speeches collected, published and commented upon with erudition and corresponding success, very few of the American languages, north and south, have been the object of thorough research. There is no scarcity of thorough linguists among us, but the reason for their want of activity in this direction simply lies in the want of proper encouragement from the authorities, the publishers, the press and the public. This is very discouraging, we confess; but it shall not hinder us from examining somewhat closer this topic, and from trying to get at the true facts.

The general public is very ignorant of languages and linguistics, and as a rule confounds linguistics with philology. Many people have a horror of philology because the Latin and Greek paradigms which they had to study in college classes, recall to them the dreariest days of compulsory education, juvenile misery and birch-rod executions. From these two languages they infer, superficially enough, that the study of all other foreign tongues must involve similar mental torments. Others believe that the Indian languages are not real tongues, deserving to be termed so; but only thwarted productions of the diseased heathen mind, because they do not agree with classical models, nor with the grammar of the primeval language of the world, the Hebrew, "which was spoken in paradise."

The majority, however, suppose that any Indian language is simply a gibberish not worth bothering about; they ought to remember that every language, even the most harmonious and perfect, is a gibberish to those who do not understand it, sounding unpleasantly to their ears, because they are unaccustomed to

its cadences and phonetic laws. The mastering of a language is the only remedy against a certain repugnance to it on the side of the listener.

A further objection which is sometimes raised against studying the tongues of the red man, consists in the erroneous assertion that they have no literature of their own. This statement is founded on a profound ignorance of existing facts, and moreover, is only the expression of the old-fashioned, mistaken idea that languages should be studied only on account of their literatures, thus confounding philology with linguistics. Indians never did and do not write down their mental productions, simply because they do not trace their immediate origin from the Eastern races, from whom we have received the priceless gift of alphabetical writing; but that they really possess such productions, as well as the Malays, Polynesians and South Africans, no one can doubt who has read of Indian prophets, orators and story-tellers, with their fluency and oratorical powers, who has listened to their multiform, sometimes scurrilous mythological tales or yarns, heard their war-shouts, the words accompanying their dancing tunes, or in the darkness of the night overheard some of their lugubrious, heart-moving dirges sung by wailing women, as they slowly marched in file around the corpse of some relative, the whole scene lit up by the flickering flames of the lurid camp-fires. A volume of Schoolcraft's Indians contains a large number of Odjibway songs, and the author of this article has himself obtained over seventy most interesting and popular songs from the Cayuses, Warm Springs, Klamaths, Taos, Iroquois and Abuákis, in their original form. So the white race alone is to blame for its imperfect knowledge of the unwritten, often highly poetical productions of an illiterate race.

The science of linguistics is of so recent a date, that few men have yet grasped its real position among the other sciences. We must henceforth consider it as a *science of nature*, and reject the old conception of it as a science of the human mind. Stylistics and rhetorics of a language may be called the province of the human mind, but language itself is a product of nature, produced through human instrumentality. Man does not invent

his language, any more than a bird does its twittering, or a tree its leaves. It requires a whole nation to produce a language, and even then such nation must start from phonetic elements already understood.

The innumerable agencies which give to a country its climate will also, by length of time, shape man and his language. Nothing is fortuitous or arbitrary in human speech and its historical developments; the most insignificant word or sound has its history, and the linguist's task is to investigate its record. Thus every language on this globe is perfect, but perfect only for the purpose it is intended to fulfill; Indian thought runs in another, more concrete direction than ours, and therefore Indian speech is shaped very differently from indogermanic models, which we, in our inherited and unjustified pride, are prone to regard as the only models of linguistic perfection. The Indian neglects to express with accuracy some relations which seem of paramount importance to us, as tense and sex, but his language is largely superior to ours in the variety of its personal pronouns, in many forms expressing the mode of action, or the idea of property and possession, and the relations of the person or persons addressed to the subject of the sentence.

Another prejudice against the Indian tongues is derived from the filthy or uninviting appearance of the red-skinned man himself. It is true that most Indians seem very miserable, disgusting, poor, silly, even grotesque and comical; yet this is partly due to the state of degradation to which he has been reduced by the land-grabbing Anglo-American settler, who has deprived him of his former, natural ways of subsistence; but it is also a characteristic of his cinnamon-complexioned race, and has been so for times immemorial. In the numerous settlements, where the condition of the Indian has undoubtedly undergone a great change for the better, through the advent of the white population, he seems just as miserable, shy, sad and filthy as before. To draw conclusions from the exterior appearance of a people on their language, and to suppose that a man not worth looking at cannot speak a language worth studying, would be the acme of superficiality, and worthy only of those who in their folly trust to appearances alone.

Pursuant to these intimations, I judge that the only means of bringing about a favorable change in public sentiment concerning the tongues of our aborigines, is a better understanding of the real object and purpose of linguistic science. Languages are living organisms, natural growths, genuine productions of race and country, and scientifically speaking, it is as important to investigate them as to describe minutely a curious tree, a rare plant, a strange insect or aquatic animal. But to gather information on them with success, a much more accurate method of transcription or transliteration than those generally used by word-collectors must be adopted. The old nonsensical method of using the English orthography, so utterly unscientific and unbearable to the sight of every instructed man, has at last been discarded almost universally. Only scientific alphabets must be here employed, and an alphabet can be considered as such only when *one* sound is constantly expressed by *one and the same* letter only. Such alphabets have been proposed by G. Gibbs, Professors Richard Lepsius, Haldeman, Alex. Ellis, and many others, and it would be a fitting subject for a congress of linguists to decide which system is the most appropriate for transcribing Indian tongues. Cursive Latin characters must be used, and in some cases, altered by diacritical marks, to convey peculiar meanings; the invention of new alphabetic systems or syllabaries like those of Sequoyah, and the hooks and crooks recently used for transcribing Cree and other northern tongues are not a help to science, because they are not *readily* legible or reducible to the accepted old-world systems of transcribing languages. A debate may also be started by a linguistic congress, what term should be employed instead of *Indian*, which is unsatisfactory in many respects; a thorough remodelling of the terminology used in Indian grammars would form another fruitful theme of discussion. Our indogermanic ideas of grammar must be entirely disregarded if we would write a correct grammatical sketch of some Indian language.

The vocabularies,¹ in the shape as we possess them now, are

¹ In 1875, the 29th year from its foundation, the Smithsonian Institution, in Washington, had collected texts, phraseology, and 771 vocabularies of about 200 words each, but for unknown reasons had published only a small portion of this enormous linguistic material.

useful in many respects. They do not give us much information about the structure of the languages, but serve at least for classifying purposes, and the small number of them which bear the stamp of accuracy in their notation of the accent and the use of a scientific alphabet, at least give a foothold for Indian phonology.

But men of science need a great deal more than this. Language is a living organism, and to study it, we must not only have the loose bones of its body, but the life-blood which is throbbing in its veins and forms the real essence of human speech. Not the stems or words alone, but the inflectional forms, the syntactical shaping of the spoken word and the sentence itself are desiderata mostly craved for. Linguists must therefore, as reliable grammars and full dictionaries (all the words properly accented!) cannot be expected at once, place their hopes in collections of *texts* illustrating the native customs and manners, the religious beliefs, superstitions, scraps of Indian history, speeches, dialogues, songs and dirges, descriptions of manufactured articles, and of the houses, tools, implements and dress of each nation and tribe visited.

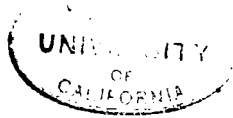
These texts should be given *in the Indian language*, and accompanied by a very accurate, and if possible, an interlinear and verbal translation of the items. All the commentaries and remarks needed for a full understanding of the texts should be added to it. The more material is furnished in this way, the better our linguists will be enabled to disclose the hidden scientific treasures stored up in these curious, but now almost unknown, forms of human speech, and to present them to the world, in the shape of grammars, dictionaries and anthologies of aboriginal prose and poetry. To the ethnologist such texts will be just as valuable as to the historian and the linguist.

THE LANGUAGES OF THE WESTERN SLOPE.

A most singular fact disclosed by the topography of language-stocks all over the world is the enormous difference of the *areas* occupied by the various families. In the eastern hemisphere, we see the Uralo-Altaic, the Chinese, the Indogermanic, Semitic

and Dravidian, the Pullo and the Congo-Kafrian or Ba'-ntu family of languages, extending over areas much wider or as wide as the Tinné, Shóshoni, Algónkin, Dakóta, Cháhta-Máskoki and Guarani stock, while small areas are, perhaps, as numerous in the eastern hemisphere as in the western. Their size evidently depends on the configuration and surface-quality of the lands, which again determine the mode of the subsistence of their inhabitants.

The natives of a country, when not influenced by the civilization of the white race, will in barren plains, steppes, prairies and woodland, generally become hunters; on the shores of the sea and on the banks of the larger rivers, they will resort to fishing, and sometimes, when settled on the coast, turn pirates or form smaller maritime powers, while the inhabitants of table-lands will till the fields, plant fructiferous trees, or collect esculent roots for their sustenance. Of these three modes of sustenance we see frequently two combined in one tribe. The fishers live peacefully and in *small* hordes, because large settlements, on *one* spot of a river bank at least, could not be supplied at all seasons of the year with a sufficient supply of fish from the river. Hunters become, from their nomadic habits, accustomed to a restless, adventurous life, and in their thus acquired warlike disposition will constantly threaten their weaker neighbors; if opportunity offers itself will declare war, overwhelm and enslave or destroy them, and thereby extend the dominion of their own language over a wider area. Agricultural pursuits bear in themselves the germs of steadiness, of order and progress; countries settled and improved by agriculturists will gradually, when the population becomes more dense, consolidate into oligarchies or monarchies, generally of a despotic character. Such political bodies have frequently absorbed neighboring communities engaged in similar pursuits, and turned with them into powerful empires, as in the case of the Aztecs, Mayas, Chibchas and Quichhuas, in the western hemisphere. For obvious reasons pastoral pursuits were almost entirely unknown in America, but were powerful agents of culture in Asia and Europe, since they facilitated the transition from the hunter or nomadic state to the state of agriculturists.



California and portions of the Columbia river basin, with their numerous rivers and the enormous quantity of salmon, trout and lamprey eel ascending annually their limpid waters, were essentially countries occupied by fisher-tribes, and before the advent of the white man, are supposed to have harbored a dense native population. Among these fisher-tribes we also find the smallest areas of languages; six of them are crowded on the two banks of the Klamath river and many more around the Sacramento, although these streams do not exceed in length, respectively, 250 and 400 miles. To produce or preserve so many small language families, totally distinct from each other in their radicals, these tribes must have lived during very long periods in a state of comparative isolation, and have remained almost untouched by foreign invaders, protected as they were by the sea coast, and by the high-towering wall of the snow-capped Sierra Nevada.

In the wide basin of the upper Columbia river several tribes hunting the bear, buffalo, elk, deer and antelope, roam over the thinly populated prairies, and occupy enormous tracts of barren and sage-brush plains. Hunting tribes need a wide extent of territory, and when it is refused to them they will fight for it. Thus originate the constant wars of extermination among many of these tribes, and their encroachments over others in regard to territory. Of this we find the most conspicuous instances among the nomadic tribes roving between the Rocky mountains and the Mississippi river.

In their morphological character the languages of America do not differ materially from the Asiatic tongues of agglutinative structure, except by their more developed power of polysynthetism. But in many of their number this faculty remains only in an embryonic state, and by dint of a far-going analysis, some of them approach the structure of our modern European analytic languages. Still, in a number of others, the incorporative tendency prevails in a high degree; they are synthetic as much as the Latin, Greek or Gothic — many of them superlatively so. They use not only prefixes and affixes, as we do, but also infixes, viz: particles, or particle-fragments, inserted into the stem. As a general thing, American languages are not sex-denoting, though

we find a distinction of sex in the dual of the Iroquois *verb*, and in some Central American verb-inflections, where *he* is distinguished from *she* in the personal pronoun. A true substantive verb *to be* is not found in any American language,¹ and the word-stems have not undergone that process of thorough differentiation between noun and verb which we observe in German, English, and French. These three languages we call accentuating, since the quantity of their syllables is of relative importance only, the influence of the accentuation being paramount. In many American languages we observe, on the contrary, that accent shifts from syllable to syllable, though only in a restricted number of words, and that instead of the accent length and brevity of the syllables receive closer attention. Such idioms we may call quantitating languages, for their system of prosody does not seem to differ much from those of the classical languages.

No plausible cause can as yet be assigned for the frequent, perhaps universal, interchangeability of *b* with *p*, *d* with *t* and *n*, *g* with *k*, χ , and the lingual *k*, *m* with *b* and *v* (*w*), *hh* with *k*, χ ; but as there is nothing fortuitous in nature or in language, a latent cause *must* exist for this peculiarity. No preceding or following sound seems to have any influence on this alternating process, and the vowels alternate in a quite similar manner.

From these general characteristics, to which many others could be added, we pass over to those peculiarities which are more or less specific to the languages of the Pacific slope. It is not possible to state any absolute, but only some relative and gradual differences between these western tongues and those of the east, of which we give the following:

The generic difference of animate, inanimate, and neuter nouns, is of little influence on the grammatical forms of the Pacific languages. A so-called *plural* form of the transitive and intransitive verb exists in Selish dialects, in Klamath, Mutsun, San Antonio (probably also in Santa Barbara), and in the Shóshoni dialects of Kauvuya and Gaitchin. Duplication of the entire

¹ Full and detailed information concerning the structure prevailing in American languages, will be found in Prof. J. H. Trumbull's article on *Indian Languages*, in Johnson's *New Cyclopædia*, vol. II. New York, 1875.

root, or of a portion of it, is extensively observed in the formation of frequentative and other derivative verbs, of augmentative and diminutive nouns, of adjectives (especially when designating colors), etc., in the Selish and Sahaptin dialects, in Cayuse, Yakon, Klamath, Pit River, Chokoyem, Cop-éh, Cushna, Santa Barbara, Pima, and is very frequent in the native idioms of the Mexican states. The root or, in its stead, the initial syllable, is redoubled regularly, or frequently, for the purpose of forming a (distributive) plural of nouns and verbs in Selish dialects, in Klamath, Kizh, Santa Barbara, and in the Mexican languages of the Pimas, Opatas (including Heve), Tarahumaras, Tepeguanas, and Aztecs.

A definite article *the*, or a particle corresponding to it in many respects, is appended to the noun, and imparts the idea of actuality to the verb in Sahaptin, Klamath, Kizh, Gaitchin, Kauvuya, Mohave. In San Antonia this article is placed *before* the noun. The practice of appending various classifiers or determinatives to the cardinal numerals, to point out the different qualities of the objects counted, seems to be general in the Pacific tongues, for it can be traced in the Selish proper, in the Nisqualli (a western Selish dialect), in Yákima, in Klamath, in Noce or Noze, and in Aztec. In De la Cuestas' Mutsun grammar, however, no mention is made of this synthetic feature.

The phonological facts, most generally observed throughout the coast lands, from Puget sound to San Diego, are as follows: Absence of the labial sound *F* and of our rolling *R* (the guttural *kh* or χ is often erroneously rendered by *r*): comparative scarcity of the medial or soft mutes as initial and final consonants of words; frequency of the *k*, or croaking, lingual *k*, identical with the *c castañuelas* of the south; sudden stops of the voice in the midst of a word or sentence; preponderance of clear and surd vowels over nasalized vowels. From all the information obtainable at present, we can properly infer that all the above mentioned peculiarities will by future investigators be discovered to exist also in many *other* tongues of our Pacific states. In the northern sections the consonantic elements predominate to an enormous degree, sometimes stifling the utterance of the vowels; many southern tongues, on the contrary, show a tendency towards

vocalism, though the consonantic frame of the words is not in any instance disrupted or obliterated by the vocalic element, as we observe it in Polynesia. Languages, with a sonorous, sweet, soft, and vocalic utterance, and elementary vocalism, are the Mohave, Hualapai, Meewoc, Tuólumne and Wintoon (and Kalapupa further north), while the dialects of the Santa Barbara stock seem to occupy an intermediate position between the above and the northern languages.

Unnumbered tongues have in the course of centuries disappeared from the surface of these western lands, and no monuments speak to us of their extent, or give a glimpse at the tribes which used them. Many others are on the verge of extinction: they are doomed to expire under the overpowering influx of the white race. Other languages labor under the continued influence of linguistic corruption and intermixture with other stocks, and the Chinook jargon seems to make havoc among the tongues of the Columbia river. To transmit these languages to posterity in their unadulterated state, is not yet altogether impossible in the decennium in which we live, and would be a highly meritorious undertaking. It would be equivalent almost to rescuing these remarkable linguistic organisms from undeserved oblivion.

In the subsequent pages I attempt to give a synoptical survey of our Pacific language-stocks west of the Rocky mountains (excluding the pueblos of New Mexico and Arizona), based on the writings of such predecessors as George Gibbs, Latham, H. H. Bancroft, Stephen Powers, and I have taken pains to carefully compare their data with the linguistic material available. For obvious reasons, I have found myself frequently constrained to dissent from them, and I claim the decision of men of undoubted competency concerning the correctness of my classifications.

SHÓSHONI.—The Shóshoni family borders and encircles all the other stocks of the Pacific slope of the United States, on the *eastern side*, and my enumeration, therefore, commences with the dialects of this populous and widely-scattered inland nation. The natives belonging to this race occupy almost the whole surface of the great American inland basin, extending from the Rocky mountains to the Sierra Nevada. To the northeast, and all along

the western border, they have crossed these towering land-marks, constructed by nature itself, but do not appear to have interfered considerably with the original distribution of the tribes in the Californian valleys and mountain recesses. The dispositions evinced by them are more of a passive and indolent than of an aggressive, offending or implacable nature, though they are savages in the truest sense of the word; some bands of Utahs, for instance, really seem too low-gifted ever to become a cause for dread to peaceful neighbors. We do not yet understand any of their numerous dialects thoroughly, but as far as the southern dialects are concerned, a preponderance of surd and nasalized *a*, *o* and *u* vowels over others is undoubted. They all possess a form for the plural of the noun; the Comanche, even one for the dual. Their dialects, are sketched in the rough, as follows:

Snake.—This dialect received its name from the Shóshoni, Lewis or Snake river, on whose shores one of the principal bands of Snake Indians was first seen. Granville Stuart, in his *Montana as it is* (New York, 1865), gives the following ethnological division: *Washakeeks*, or Green river Snakes, in Wyoming: *Took-arikkah*, or Salmon river Snakes (literally, Mountain-sheep eaters), in Idaho. These two bands he calls genuine Snakes. Smaller bands are those of the *Salt Lake Diggers* in Utah, the *Salmon Eaters* on Snake river, the root-digging *Bannoeks* or *Panasht*, on Boisé, Malheur and Owyhee rivers, and a few others, all of whom differ somewhat in their mode of speech. Snakes of the *Yahooshkin* and *Walpahpe* bands were settled recently on Klamath reserve in Oregon, together with a few Piutes.

Utah (*Yutah*, *Eutaw*, *Ute*; Spanish, *Ayote*), is spoken in various dialects in parts of Utah, Wyoming and Arizona territories, and in the western desert regions of Colorado, where a reservation of Confederated Utes has been established, with an area of twelve millions of acres. To draw an accurate limit between the numerous bands of the Utahs, and those of the Snakes and Payutes seems to be impossible at present, since all of them show the same national characteristics; I give the names of some of the more important bands of Utah Indians, which no doubt differ to a certain degree in their sub-dialects: *Elk Mountain Utahs* in

southeastern Utah; *Pah-Vants* on Sevier lake, southeast of Salt lake; *Sampitches*, on Sevier lake and in Sampitch valley; *Tash-Utah* in northern Arizona; *Uintu-Utahs* in Uintah valley reserve; *Weber-Utahs*, northeast of Salt lake; *Yampa-Utahs*, south of the Uinta-Utahs.

Payute — (*Pah-Utah*, *Pi-Ute* — literally, River-Utah; Utah, as spoken on Colorado river), a sonorous, vocalic dialect, spoken throughout Nevada, in parts of Arizona and California. The dialect of the Southern Payutes on Colorado river closely resembles that of the neighboring *Chemehuevis*, but differs materially from that spoken in northern Nevada, and from the dialect of Mono and Inyo counties, California. Other Payute tribes are the Washoes and Gosh-Utes.

Kauvuya — (*Cdwio*; Spanish, *Cahuillo*). This branch of the Shóshoni stock prevails from the Cabezon mountains and San Bernardino valley, California, down to the Pacific coast, and is at present known to us in four dialects: *Serrano*, or mountain dialect, spoken by Indians, who call themselves *Takhtam*, which means men, people. *Kauvuya*, in and around San Bernardino valley. *Gaitchin* or *Kechi*, a coast dialect in use near the missions of San Juan Capistrano and San Luis Rey de Francia. *Netéla* is another name for it. *Kizh*, spoken in the vicinity of the mission of San Gabriel by a tribe calling itself *Tobikhar*, or settlers, and of San Fernando mission, almost extinct. The two last mentioned dialects considerably differ among themselves, and from the mountain dialects of the *Takhtam* and *Kauvuyas*.

Comanche, formerly called *Hietan*, *Jétan*, *Na-uni*, in northern Texas, in New Mexico and in the Indian territory. They are divided into three principal sections, and their language resembles in a remarkable degree that of the Snakes.

Various Shóshoni dialects have largely influenced the stock of words of a few idioms, which otherwise are foreign to this family. We mean the Pueblo idioms of New Mexico, the Moqui of Arizona, and the Kiowa, spoken on Red river and its tributaries. There exists a deep-seated connection between the Shóshoni stock and several languages of northern Mexico in the radicals, as well as in the grammatical inflections, which has been pointed

out and proved in many erudite treatises by Professor T. C. E. Buschmann, once the collaborator of the two brothers Alexander and William von Humboldt.

YUMA.—The Indians of the Yuma stock are scattered along the borders of the Lower Colorado and its affluents, the Gila river and the Bill Williams fork. Their name is derived from one of the tribes — the Yumas — whom their neighbors frequently call Cuchans or Ko-u-tchans. Some dialects, as the Mohave, possess a large number of sounds or phonetic elements, the English *th* amongst them, and are almost entirely built up of syllables, which contain but one consonant followed by a vowel. The verb possesses a plural form. At present we know of about seven dialects: *Mohave* (Spanish *Mojave*), on Mohave river and on Colorado river reservation; *Hualapai*, on Colorado river agency; *Maricopa*, formerly Cocomarcopa, on Pima reservation, Middle Gila river. *Tonto*, Tonto-Apaches or *Gohun*, on Gila river and north of it; *Cocopa*, near Fort Yuma and south of it; *Cuchan* or Yuma, on Colorado river; their former seats were around Fort Yuma; *Diegeño* and *Comoyei*, around San Diego, along the coast, on New river, etc.

Scattered tribes are the kóninos, and the Yavipais or Yampais, east of the Colorado river. The term *opa*, composing several of these tribal names, is taken from the Yuma, and means *man*; the definite article *-tch* joined to it forms the word *épach* or *Apache*, man, men, people.

PIMA.—Dialects of this stock are spoken on the middle course of the Gila river, and south of it on the elevated plains of southern Arizona and northern Sonora, (Pimería alta, Pimería bá ja). The Pima does not extend into California, unless the extinct, historical *Cajuenches*, mentioned in Mexican annals, spoke one of the Pima (or Pijmo, Pimo) dialects. *Pima*, on Pima reserve, Gila river, a sonorous, root-duplicating idiom; *Névome*, a dialect probably spoken in Sonora, of which we possess a reliable Spanish grammar, published in Shea's *Linguistics*; *Pápago*, on Pápago reserve in southwestern Arizona. The Pima language bears a close relationship to the various dialects of the Opata family and to a number of languages spoken in the interior Mexican states.

SANTA BARBARA.— We are not cognizant of any national name given to the race of Indians who spoke the intricate dialects of this language-family. Its northern dialects differ as much from the southern as Minitaree does from Santee-Dakota, or Scandinavian from the dialects of southern Germany.

The southern dialects are: *Santa Inez*, near Santa Inez mission; liturgic specimens, translations of parts of catechisms, etc., of this dialect, and of that of Santa Barbara mission, were forwarded to the Smithsonian Institution by Mr. Alex. S. Taylor, of Santa Barbara city; *Santa Barbara*, around Santa Barbara mission, closely related to *Kasud* or *Kashwdh*, Spanish Cienequita, three miles from Santa Barbara mission; *Santa Cruz island*, this dialect reduplicated the root in forming the plural of nouns, and probably extended over the other islands in its vicinity; it is extinct now.

The northern dialects are: *San Louis Obispo*; stock of words largely mixed with Mutsun terms. The Indian name of the locality was Tixilini. *San Antonio*, spoken at or near San Antonio mission, known to us through Padre Sitjar's dictionary. The plural of nouns is formed in more than twelve different ways, and the phonology is quite intricate.

MUTSUN.— This name, of unknown signification, has been adopted to designate a family of dialects extending from the environs of San Juan Bautista, Cal., in a northwestern direction up to and beyond the bay of San Francisco and the straits of Karquines, in the east reaching probably to San Joaquin river. It is identical with the language called *Runsien* or *Rumsen*, and shows a great development of grammatical forms. Its alphabet lacks the sounds of *b*, *d*, *f* and of our rolling *r*. We can distinguish the following dialects: *San Juan Bautista*; Padre F. Felipe Arroyo de la Cuesta has left us a grammar and an extensive phraseological collection in this idiom, which were published by John G. Shea, in two volumes of his Linguistic Series. *Mission of Carmelo*, near the port of Monterey; the Eslenes inhabited its surroundings. *Santa Cruz*, north of the bay of Monterey; vocabulary in *New York Historical Magazine*, 1864 (Feb.), page 68. *La Soledad mission*; if this dialect, of

whose grammatical structure we know nothing, really belongs to the Mutsun stock, it is at least largely intermixed with San Antonio elements. The tribe living around the mission was called Sakhones. *Costaño*, on the bay of San Francisco, spoken by the five extinct tribes of the Ahwastes, Olhones, Altahmos, Romonans, Tulomos. See Schoolcraft's Indians, vol. II, page 494.

Under the heading of "Mutsun" I subjoin here a series of dialects spoken north of the bay of San Francisco, which judging from the large number of Mutsun words, probably belong to this stock, but show also a large amount of Chocuyem words, which dialect is perhaps not, according to our present information, a Mutsun dialect. This point can be decided only when its grammatical elements, as verbal inflection, etc., will be ascertained.

The dialects, showing affinities with Mutsun, are as follows: *Olamenke*, spoken on the former Russian colony about Bodega bay, Marin Co.; vocabulary in Wrangell, Nachrichten, etc., St. Petersburg, 1839, and reprinted by Prof. Buschmann. *San Rafael mission*, Marin Co. Vocabulary taken by Mr. Dana; printed in Hale's Report of Exploring Expedition, and in *Transactions of American Ethnological Society*, II, page 128; the words are almost identical with those of Chocuyem. *Talatui* or *Talantui*, on Kassima river, an eastern tributary of the Sacramento, is clearly a dialect of Chocuyem; vocabulary by Dana, *Tr. Am. Ethn. Soc.*, vol. II. *Chokuyem* or *Tchokoyem* was the name of a small tribe once inhabiting Marin county, north of the Golden Gate. Their language extended across San Antonio creek into Sonoma valley, Sonoma Co. G. Gibbs's vocabulary published in Schoolcraft, III, 428-sq, discloses the singular fact that almost all Chocuyem words are *dissyllabic*, and frequently begin and terminate in vowels. A Lord's prayer in Chocuyem was published in Duffot de Mofras' Explorations, II, 390, and reproduced by Bancroft; the name of the tribe living around the mission of San Rafael was Youkiousmé, which does not sound very alike, nor very different from Chocuyem. Some of the more important terms agreeing in the Chocuyem and in the Mutsun of San Bautista, are as follows:

ENGLISH.	CHOCUYEM.	MUTSUN.
head	móloh	mogel
teeth	ki-ih̄t	sit, si-it
foot	coyok	coro
house	kotchâ	kuka, ruca
white	pahkiss	palcasmin
black	mûlûtá	humulusmin
I, myself	kani	can
thou	mī	men
two	osha	utsgin
father	api	appa
mother	enu	anan

The supposition that the Chocuyem belongs to the Mutsun stock is greatly strengthened by the mutual correspondence of these terms, but cannot be stated yet as existing on this ground alone, for the terms for most numerals, parts of human body, and those for fire, water, earth, sun, moon and star disagree entirely.

The Chocuyem stock probably included also the Petaluma or Yolhios, as well as the Tomalo and other dialects spoken beyond the northern limit of Marin county. From a notice published by Alex. S. Taylor, Esq., we learn that Padre Quijas, in charge of Sonoma mission from 1835 to 1842, composed an extensive dictionary of the idiom spoken in the vicinity of this religious establishment.

YOCUT.—This tribe lives in the Kern and Tulare basins, and on the middle course of the San Joaquin river. Consolidated in 1860 into one coherent body by their chief, Pascual, the Yocuts show more national solidarity than any other California nation. In the *Overland Monthly*, Mr. Stephen Powers gave a sketch of this remarkable tribe, and described at length one of their terrific nocturnal weeping dances, called Kotéwachil. The following tribes and settlements may be mentioned here: *Taches* (*Tatches*), around Kingston; *Chewenee*, in Squaw valley; *Watooga*, on King's river; *Chookchancies*, in several villages; a *King's river tribe*, whose vocabulary is mentioned in Schoolcraft's *Indians*, vol. iv, 413-414; *Coconoons*, on Merced river; their vocabulary in Schoolcraft, iv, 413; a tribe formerly living at Dent's Ferry, on Stan-

islaus river, in the Sierra Nevada of Calaveras county, vocabulary given by Alex. S. Taylor in his *California Farmer*. In former years many individuals of the Yocut nation were carried as captives to San Luis Obispo, on the coast, and were put to work in the service of the mission.

MEEWOC.—Stephen Powers (*Overland Monthly*, April, 1873), calls the Meewoc tribe the largest in California in population, and in extent. "Their ancient dominion reached from the snow-line of the Sierra Nevada to the San Joaquin river, and from the Cósumnes to the Fresno: mountains, valleys and plains were thickly peopled." Bands of this tribe lived in a perfectly naked state in the Yosemite valley, when this spot first came into notice. The language is very homogeneous for a stretch of one hundred and fifty miles, and the radicals and words are remarkably vocalic. Meewoc, mi-ua, mivie, is the word for Indian, and *osoamit*, whence Yosemite, which means the grizzly bear; *wakdlumni* is a river, hence Mokélumne was formed by corruption; *kossumi* a salmon, hence Cósumnes river. Some of the Meewoc bands were called by the following names, which probably represent as many dialects or sub-dialects: *Choomteyas*, on middle Merced river; *Cawnees*, on Cósumne river; *Yulónees*, on Sutter creek; *Awnaees* in Yosemite valley; *Chowchillas*, on middle Chowchilla river; *Tuólumne*, on Tuólumne river. Their vocabulary was taken by Adam Johnson, and published in Schoolcraft's *Indians*, iv, 413. *Four Creek Indians*; vocabulary published in the *San Francisco Wide West* in July, 1856, under the name of Kahwéyah, but differing considerably in the words given by Mr. Powers. Some further Meewoc bands are called after the cardinal points of the compass.

MEIDOO.—The Meidoo nation formerly extended from Sacramento river to the snow-line, and from Big Chico creek to Bear river, the cognate Neeshenams from Bear river to the Cósumnes, where the language changed abruptly. The Meidoos are a joyful, merry and dance-loving race. Their language is largely made up of vocalic elements; vowels and n's terminate more than one-half of their words. We possess vocabularies of the following bands: *Yuba*, opposite the mouth of Yuba river, a tributary of

Feather river. A collection of some forty words was made by Lieut. Edward Ross, and published in *Historical Magazine* of New York, 1863, page 123. *Cushna*, on mountains of South Yuba river, Nevada county. Vocabulary by Adam Johnson, an Indian agent, published in *Schoolcraft*, II, page 494. *Pujuni*, or Bushumnes, on western bank of Sacramento river; *Secumnes*, also west of Sacramento river. Short vocabularies of both dialects were collected by Mr. Dana, and reprinted in *Tr. Am. Ethnol. Soc.*, vol. II. *Neeshenam*, south of Bear river; Powers separates them as a distinct nation from the Meidoos: but from the words given, it appears that both speak dialects of the same language. Their bands are partly called after the points of the compass. Of other Meidoo tribes or bands, we mention the *Otdkumne* in the Otakey settlement; the *Ollas*, opposite mouth of Bear river, and the *Concows* or *Cancows*, in Concow valley. Mr. Powers gives the names of about a dozen more. Perhaps the little tribe of the undersized *Noces* or *Nozes*, in Round mountain, Oak run and vicinity, should be classified here, because a few of their numerals, which almost all end in *mona*, agree with those of the Cushnas. Mr. Powers supposes these and the ferocious *Mill Creek Indians* to be of foreign origin.

WINTOON.—The timid, superstitious, and grossly sensual race of the Wintoons is settled on both sides of upper Sacramento and upper Trinity rivers, and is found also on the lower course of Pit river. Stephen Powers calls their language rich in forms and synonyms; the dialect studied by Oscar Loew forms the plurals of its nouns by means of a final *-t* preceded by a reduplicated vowel of the root. Loew's vocabulary, published with one of the Uinta-Utah and thirteen others by the author of this article in his recent publication, *Zwölf Sprachen aus dem Südwesten Nord-Amerikas*; *Weimar*, 1876 (150 pages), offers a few words of very difficult guttural pronunciation; but in general the language (called *Digger* in that vocabulary) is of a soft and sonorous character.

Some of the more noteworthy Wintoon tribes are as follows: *Downum Wintoons*, on Cottonwood creek, the nucleus of this race: *Noemocs* or southern people; *Poomeocs* or eastern people;

Nome Lakees or western talkers; *Wikainmocs*, on extreme upper Trinity river and Scott mountain; *Normocs*, on Hay Fork; *Tehdmas*, near Teháma Town; *Mag Reading Wintoons*: vocabulary taken about 1852, by Adam Johnson, and published in *Schoolcraft*, iv, p. 414. *Cop-éh*. A tribe of this name was found at the head of Putos creek, the words of which are mostly dissyllabic, and partake of the vocalic nature of southern languages.

Stephen Powers calls by the name *Patween* a race inhabiting the west side of the middle and lower Sacramento, Caché and Putos creek, and Napa valley. Physically, the Patweens do not differ from the Wintoons. Their complexion varies from brassy bronze to almost jet-black, they walk pigeon-toed, and have very small and depressed heads, the arch over their eyes forming sometimes a sharp ridge. They are socially disconnected and have no common name; but their language does not differ much in its dialects, and belongs, as far as we are acquainted with it, to the Winton stock. Powers (*Overland Monthly*, December, 1874, p. 542, sqq.) classes under this heading a number of clans or bands, of which we mention:—*Suisuns*, in Suisun valley, Solano Co.; *Ululatos*, in Ulatus creek, near Vacaville: *Lewyts* and *Putos*, in Putos creek; *Napas*, in Napa valley; *Lolsels*, east of Clear lake; *Corusies*, near Colusa, on Sacramento river; *Chenposels*, on Caché creek. *Noyukies*, inter-married with Wintoons, on Stony creek. *Guilulos* or *Guillilas*, in Sonora valley. A Lord's prayer given in their dialect, by Duflot de Mofras, II, p. 391, differs entirely from the Chocuyem, hence the Guilulo may belong to the Patween stock. The words of the *Napa* root-diggers, collected by Major Bartlett, and another vocabulary of the *Napa* have not yet been published by the Smithsonian Institution.

YUKA.—The Yuka or Uka language extends over a long and narrow strip of territory parallel for a hundred miles to the Pomo dialects and the coast, in and along the coast range. The area of the Pomo language, however, breaks across that of the Yuka from the west at Ukiah and surrounds Clear lake. The revengeful race of the Yukas, who are conspicuous by very large heads placed on smallish bodies, originally dwelt in Round

valley, east of Upper Eel river. Nome Cult, meaning western tribe, is the Wintoon name for this solitary and fertile valley, which has become the seat of an Indian reservation. Of the Yuka we have a short vocabulary by Lieut. Edward Ross in *New York Historical Magazine* for April, 1863. Surd vowels, perhaps nasalized, are frequent; also the ending *-um*, *-un*, which is probably the plural termination of nouns. No connection with the Chokuyen is perceptible, but a faint resemblance with the Cushna can be traced in a few words. Other tribes speaking Yuka are the *Ashochemies* or *Wappos*, formerly inhabiting the mountain tract from the Geysers down to Calistoga Hot springs; the *Shumeias*, at the head of Eel river; and the *Tahtos*, on the middle and south forks of Eel river, and at the head of Potter valley.

ПОМО.—The populous, unoffending Pomo race is settled along the coast, on Clear lake and on the heads of Eel and Russian rivers; a portion of them now inhabit the reservation of Round valley, together with their former tormentors, the Yukas. Those of the interior show more intelligence and a stronger physical constitution than the coast Pomos. The Calito Pomos and the Ki Pomos, on Eel river, have adopted the Tinné dialect of the Wi Lakee, which is closely allied to the Hoopa. Powers considers as the nucleus of the numerous Pomo tribes the Pome Pomos, living in Potter valley, a short distance northwest of Clear lake. The language rapidly changes from valley to valley; but the majority of the dialects are sonorous, and the vocalic element preponderates.

We enumerate the following bands: — *Pome Pomos*, earth people, in Potter valley. *Ballo Ki Pomos*, Wild Oat valley people, in Potter valley. *Choan Chadéla Pomos*, Pine-pitch people, in Redwood valley. *Matomey Ki Pomos*, Wooded valley people, around Little lake. *Usàls* or *Camalèl Pomas*, on Usal creek. *Shebalne Pomos*, neighbor people, in Sherwood valley. *Gallinometers*, below Healdsburg; a few grammatical informations given in H. H. Bancroft's *Native Races*, vol. III, part second. *Yuka-i* or *Ukiah*, on Russian river (not to be confounded with Yuka in Round valley); vocabulary by G. Gibbs in *Schoolcraft*, vol. III (1853). *Choweshak*, at the head of Eel river; Gibbs's vocabulary in *Schoolcraft*, III, pp. 434, sqq. *Batemdikaie*, at the head of Eel

river, called after the valley in which they live; vocabulary in Schoolcraft, III, 434, sqq. *Kulanapo*, on southwest shore of Clear lake; vocabulary in Schoolcraft, III, 428. Bancroft has called attention to the fact that many words of this and other dialects, spoken south of it, correspond to Polynesian and Malay terms, but on account of the uncertain nature of Oceanic consonantism, he is unwilling to draw any ethnological deductions from this coincidence. *Kulanapo* agrees pretty closely with *Choweshah* and *Batemdikaie*, but differs somewhat from *Chwachamaju*. *Chwachamaju*, to the north of *Bodega* bay. The words in *Wrangell's* vocabulary (see *Olamentke*, *mutsun*) appear to agree more closely with *Yuka-i* than with any other Pomo dialect.

WISHOSK.—Spoken on a very small area around the mouth of the Eel river, on the seacoast, and called so from the Indian name for Eel river. We know of two sub-dialects almost entirely identical, and showing a rather consonantic word-structure. Vocabularies were collected with care by George Gibbs, and published in Schoolcraft, III, p. 422. *Weeyot*, or *Veeard*, on mouth of Eel river; *Wishosk* on northern part of Humboldt bay, near mouth of Mad river; *Patawat*, identical with G. Gibbs's *Kowilth*, or *Koquilth*; and about a dozen other settlements speaking dialects of the same language.—Proceeding through the basin of the Klamath river, we meet with a number of small, socially incoherent, bands of natives engaged in salmon or trout fishing on the shores of this stream and of its tributaries. Some do not possess any tribal name, or name for their common language, and were in a bulk called Klamath river Indians, in contradistinction to the Klamath lake Indians, *E-ukshiknit* on the head of Klamath river. These latter I call here *Klamaths*.

EUROK.—The Euroc tribe inhabits both banks of the Klamath river, from its mouth up to the Great bend at the influx of the Trinity river. The name simply means down (down the river), and another name given them by their neighbors, *Pohlik*, means nearly the same. Their settlements frequently have three or four names. *Requa* is the village at the mouth of the Klamath river, from which they set out when fishing at sea. The language sounds rough and guttural; the vowels are surd, and often lost

between the consonants, as in *mrpr*, *nose*; *chlh*, *chlec*, *earth*; *wrh-yenex*, *child*. In conversation, the Eurocs terminate many words by a catching sound (-h'-) with a grunt: with other Indians we observe this less frequently. They are of darker complexion than the Cahroks, and in 1870 numbered 2,700 individuals in the short stretch of forty miles along the river.

WEITS-PEK.—In Schoolcraft we find a vocabulary named after the Indian encampment at Weits-pek, a few miles above the great bend of Klamath river, on the north shore, whose words totally disagree from Eurok, Cahrok, Shasta, or any other neighboring tongue.

CAHROK.—*Cahrok*, or *Carrook*, is not a tribal, but simply a conventional name, meaning above, upwards (up the Klamath river, as Eurok means down, and Modoc — probably — at the head of the river). The Cahrok tribe extends along Klamath river from Bluff creek, near Weits-pek, to Indian creek, a distance of eighty miles. Pehtsik is a local name for a part of the Cahroks; another section of them, living at the junction of Klamath and Salmon (or Quoratem) rivers, go by the name of Ehnek. Stephen Powers thinks that the Cahroks are probably the finest tribe in California; that their language much resembles the Spanish in utterance, and is not so guttural as the Euroc. In Schoolcraft we find vocabularies from both tribes.

TOLEWA.—The few words of the Tolewa, or Tahlewah language on Smith river, between Klamath and Rogue rivers, which were given to G. Gibbs by an unreliable Indian from another tribe, show a rough and guttural character, and differ entirely in their radicals from any other language spoken in the neighborhood.

SHASTA.—At the time of the Rogue river war the Shastas, or Shasteecas, became involved in the rebellion of their neighbors, and after their defeat the warriors of both tribes were removed, with their families, to the Grand Ronde and Siletz reserves in Oregon. Hence, they almost entirely disappeared from their old homes in the Shasta and Scott valleys, which are drained by affluents of the Klamath river, and also from their homes on Klamath river, from Clear creek upwards. Nouns form their

plurals by adding *oggára*, *ukára*, *many*, and the language does not sound disagreeably to our ears. We know this vocalic tongue only through a few words, collected by Dana; the Smithsonian Institution owns three vocabularies. The Scott's valley band was called *Watsahéwa*; the names of other bands were *T-ka*, *Iddoa*, *Hoteday*, *We-ohow*.

PIT RIVER.— The Pit river Indians, a poor and very abject-looking lot of natives, live on upper Pit river and its side creeks. In former years they suffered exceedingly from the raids of the Modocs and Klamath lakes, who kidnapped and kept them as slaves, or sold them at the slave-market at *Yánex* in southern Oregon. Like the Pomos and most other Californians, they regard and worship the coyote-wolf as the creator and benefactor of mankind. Powers calls their language "hopelessly consonantal, harsh and sesquipedalian, very unlike the sweet and simple tongues of the Sacramento river." Redoubling of the root seems to prevail here to a large extent. A few words from a sub-dialect are given by Mr. Bancroft, which do not differ materially from the *Palaik* (or mountaineer) vocabulary printed in *Transactions of Am. Ethnol. Soc.*, vol. II, p. 98. After a military expedition to their country, General Crook ordered a removal of many individuals of this tribe to the Round valley reserve, where they are now settled. *Pú-su*, *Pú-isu* is the Wintoon name of the Pit river Indians, meaning eastern people. According to Mr. Powers's statement (*Overland Monthly*, 1874, pp. 412, sgg.), the Pit river Indians are sub-divided in: *Achomdwoes* in the Fall river basin; from *achoma* river, meaning Pit river. *Homefcuttelies*, in Big valley. *Astakaywas* or *Astakaywich*, in Hot spring valley; from *astakáy*, hot spring. *Illmawes*, opposite Fort Crook, south side of Pit river. *Pdcamallies*, on Hat creek.

KLAMATH.— The watershed between the Sacramento and Columbia river basin consists of a broad and mountainous tableland rising to an average height of four to five thousand feet, and embellished by beautiful sheets of fresh water. The central part of this plateau is occupied by the Klamath reservation, which includes lakes, prairies, volcanic ledges, and is the home of the Klamath stock of Indians, who inhabit it together with

the two Shóshoni tribes mentioned above. The nation calls itself (and other Indians) *Mdklaks*, the encamped, the settlers, a term which has been transcribed into English *Múckabucks*, and ought to include all the four divisions given below. About 145 Modocs were, after the Modoc war of 1873, removed to Quápaw agency, Indian territory. The language is rich in words and synonyms, only slightly polysynthetic, and lacks the sounds *f* and *r*. They divide themselves into: *Klamaths* or *Klamath Lakes*, *E-ukshikni*, from *e-ush*, *lake*; on Big Klamath lake. *Modocs* originally inhabiting the shores of Little Klamath lake, now at Yánex. The Pit Rivers call them *Lútuam*; and they call the Pit Rivers, *Mótuash* or southern dwellers. *Kómbatuash*, grotto or cave dwellers, from their abode in the Lava Bed caves—a medley of different races. Some *Mólelc* or *Molále*, renegades of the Cayuse tribe, have recently become mixed with Rogue Rivers and Klamaths, and have adopted the Klamath language in consequence. No Klamath sub-dialects exist, the idioms of all these tribes being almost identical. Klamaths and other southern Oregonians communicate with other tribes by means of the Chinook jargon.

THE TINNÉ FAMILY.—The Tinné family of languages, which extends from the inhospitable shores of the Yukon and Mackenzie rivers to Fraser river, and almost to Hudson's bay, sent in bygone centuries a powerful offshoot to the Rio Grande del Norte and the Gila rivers, now represented by the Apache, Lipan and Návajo. Other fragments of the Tinné stock, represented by less populous tribes, wandered south of the Columbia river, and settled on the coast of the Pacific ocean; they were the Kwalhioqua, Tlatskanai, Umpqua, Rogue Rivers (or Rascal Indians) and the Hoopa. Following them up in the direction from south to north, we begin with the Hoopa.

Hoopa.—The populous and compact Hoopa (or better, Húpô) tribe has its habitation on the Trinity, near its influx into Klamath river, California, and for long years kept in awe and submission the weaker part of the surrounding tribes and clans, exacting tributes, and even forcing their language upon some of them, as upon the Chimalaquays on New river, the Kailtas on Redwood

creek, and upon the two Pomo bands above mentioned. Powers holds their language to be copious in words, robust, strong in utterance, and of martial simplicity and rudeness. The *Wylakies*, or, *Wi Lakees*, near the western base of Shasta butte, speak a Hoopa dialect. No information is at hand to decide whether the *Lassies* on Mad river, the *Tahahteens* on Smith river, and a few other tribes, speak, as the assumption is, Tinné dialects or not.

Rogue River.—The *Tototen*, *Tootooten*, or *Tututamys* tribe, living on Rogue river and its numerous side creeks, Oregon, speaks a language which is, like the majority of Oregonian and northern tongues, replete of guttural and croaking sounds. According to Dr. Hubbard, whose vocabulary is published in Taylor's *California Farmer*, this nation comprised in 1856 thirteen bands, consisting in all of 1,205 individuals. (See article *Shasta*.) The appearance of the numerals, the terms for the parts of the human frame, many other nouns and the pronoun, *mine*, *my* (ho, hwo, hu), induced me to compare them with the Tinné languages. They differ considerably from Hoopa and Taculli, but singularly agree with Apache and Náavajo, and Tototen has, therefore, to be introduced as a new offshoot of the coast branch into the great Tinné or Athapascan family of languages. The Smithsonian Institution owns two vocabularies, inscribed "Rogue River," two "Tootooten," and one "Toutouten."

Umpqua.—The Umpquas live in and around Alsea sub-agency, on the sea coast, together with the Alsea, Sayústkla and Coos Indians. Their idiom is softer than the other branches of the Tinné stock. Further north we find two other small tribes of the same origin, whose languages were studied only by Horatio Hale, of Wilkes's exploring expedition. One of them was the *Tlatskanai*, south of Columbia river; the other, the *Kwalhioqua*, at the outlet of this stream, both extremely guttural. On account of the smallness of the tribes speaking them, these idioms have probably become extinct; their owners merged into other tribes, and were identified with them beyond recognition. They roved in the mountains at some distance from the coast and the Columbia, living on game, berries and esculent roots.

YAKON.—Before 1848, the Yakon tribe was settled on the

Oregon coast, south of the Tillamuks; numbering then about seven hundred individuals. In the collection of fifty Yakon words, given in *Transactions of Am. Ethn. Soc.*, II, part 2d, pp. 99 sqq., we discover very few monosyllables, but many clusters of consonants, not easily pronounced by English speaking people, as *kwotχl*, *fingers*; *pusuntχlχa*, *three*.

CAYUSE.—The national appellation of the Cayuses, whose home is in the valley of Des Chutes river, Oregon, is *Wayiletpu*, the plural form of *Wa-ilet*, one Cayuse man. The *Wayiletpu* formerly were divided into Cayuses and Moléles, but the latter separated, went south and joined other tribes (see Klamath), or were removed to the Grande Ronde reserve. The Cayuses are rapidly assimilating, or identifying themselves, with the *Wala-walas* on and around Umatilla agency, about seventy miles east of Des Chutes river outlet, and a majority of them has forgotten already their paternal idiom. Judging from the Cayuse words printed in the *Transactions of Am. Ethn. Society*, II, p. 97, this language prefers consonantic to vocalic endings, and possesses the aspirates *th* and *f*. The occurrence of both sounds, especially of *f*, is not uncommon in Oregonian languages.

KALAPUYA.—The original seats of this tribe were in the upper Willamette valley. The laws of euphony are numerous in this language, whose utterance is soft and harmonious; thus it forms a remarkable contrast with all the surrounding languages, the sounds of which are uttered with considerable pectoral exertion. The personal pronoun is used also as a possessive; no special termination exists for the dual or plural of nouns. *Yamkali*, on head of Willamette river, is a dialect of Kalapuya.

CHINOOK.—The populous, Mongol-featured nation of the Chinooks once dwelt on both sides of the Lower Columbia; but after the destruction of four-fifths of their number in 1823 by a terrible fever-epidemy, a part of the survivors settled north, and now gradually disappear among the Chehalis. The pronunciation is very indistinct, the croakings in lower part of the throat frequent, the syntaxis is represented as being a model of intricacy. To confer with the Lower, the Upper Chinooks had

to use interpreters, although the language of both is of the same lineage. The dialects and tribes were distributed as follows: *Lower Chinook*, from mouth of Columbia river up to Multnomah island, Clatsop; *Chinook proper*; Wakiakum; Katlámat. *Middle Chinook*—Multnomah, Skilloot. *Upper Chinook*—Watlála or Watxlála, showing a dual and a plural form in the inflection of the noun; Klakamat, south-east of Portland, a tribe once dispossessed of its homes by the Moléles; the idiom of the Cascade Indians, and of the extinct Waccanessisi. Following the authority of George Gibbs, I mention also as an Upper Chinook dialect the Wasco or Cathlasco language. From their original homes east of the Dalles, the Wascoes were removed to the Warm Spring agency.

CHINOOK JARGON.—The location of the Chinooks in the central region of western border commerce, and on the outlet of the international roadway of Columbia river, rendered the acquisition of the Chinook, or Tsinúk language very desirable for the surrounding tribes. But the nature of this language made this a rather difficult task, and so a trade language gradually formed itself out of Chinook, Chehali, Selish, Nootka and other terms, which, on the advent of the whites, were largely increased by French, and in a less degree by English words. The French words were derived from the Canadian and Missouri patois of the fur traders. Two-fifths of the jargon terms, were taken from Chinook dialects, and as the inflectional forms, prefixes and affixes of these unwieldy idioms were dropped altogether, and replaced by particles or auxiliaries, the acquisition of the jargon became easy. A comprehensive sketch of this idiom will be found in the preface to George Gibbs's *Dictionary of the Chinook Jargon*, New York, 1863 (in Shea's *Linguistics*).

We have similar instances of medley jargons from very disparate languages in the *Lingua Franca* of the Mediterranean ports, in the Pidgin English of Canton, the Negro-English-Dutch of Surinam, the Slavé on the Upper Yukon river, in a Sahaptin slave-jargon, and in the numerous women-languages of South America.

SAHAPTIN.—This name belongs to a small affluent of the Koo-

kooskie or Clearwater river, and has been adopted to designate the stock of languages spoken in an extensive territory on the middle and lower Columbia river, and on its tributaries, Yákima, Paluse, Clearwater and Snake rivers. The morphological part of the Sahaptin grammar is rich and well developed, and polysynthetism is carried up to a high degree. The exterior of the race recalls the bodily structure, not the complexion, of the Mongolian type of mankind. The easternmost tribe is:

Nez-Percés, the most numerous and powerful Sahaptin tribe, settled on a reserve in northern Idaho (about 2,800 Indians), or roaming in the neighborhood. A sketch of their grammar was published in *Transactions of American Ethn. Society*. The western and northern Sahaptin tribes are the following: *Wdla-wdla* (rivermen), on Umatilla agency, in northeastern Oregon: *Palús* or Paloose, on Palús river and Yákima reservation; *Yákama* or Yákima, on Yákima reserve, Washington territory. Rev. Pandosy wrote a Grammar, Texts and Dictionary of this dialect, which were published in Mr. Shea's Linguistic Series. From their habitat they are called Pshuanwappum, dwellers in the stony country. *Klíkitat*, on Yákima reserve and vicinity, formerly roaming through the woodlands around Mount St. Helens. *Umatilla*, on Oregon side of Columbia river and on Umatilla agency. No vocabularies. *Warm Spring Indians* on west side of Middle Des Chutes river. They call themselves *Tishxáni-hhláma*, after a locality on that water-course, or *Milli-hhláma*, from the thermal sources surging on the territory of their reservation (*milli*, bubbling, or tepid, *hhláma* "belonging to, pertaining). A slave jargon exists among the Nez-Percé Indians, which originated through their intercourse with prisoners of war, and contains expressions for *eye, horse, man, woman* and other most common terms, which are entirely foreign to Sahaptin.

SELISH.—The Selish family extends from the Pacific ocean and the straits of Fuca, through America and partly through British territory to the Rocky mountains and the 113. meridian. This race is most densely settled around Puget sound, and its main bulk resides north of Columbia river. By joining into one name

their westernmost and easternmost dialect, their language has been called also Tsihaili-Selish, or Cheháli-Selish. A large number of words of this truly northern and superlatively jaw-breaking language are quite unpronounceable to Anglo-Americans and Europeans — i. e., tsatɣlsh, *shoes*; skaiɣlentɣl, *woman* in Tsihaili; shitɣltso, *shoes* in Atnah. This stock abounds in inflectional and syntactical forms, and redoubles the root or part of it extensively, but always in a *distributive* sense. It divides itself into a large number of dialects and subdialects, among which we point out the subsequent ones as probably the most important, going from west to north, and then to the east: *Nsietshawus* or *Tillamuk* (Killamuk), on Pacific coast, south of Columbia river; *Tsihaili*, *Chehdlí*; on or near Pacific coast Washington territory: has three subdialects; *Tsihaili* proper on Chehali river and in Puyallup agency; *Quiantl*, *Quaiantl* or *Kwantlen*; *Quéniauitl*. A few *Chehalis* and Chinooks inhabit Shoalwater bay. *Cowlitz* or *Ká-uálitisk*, spoken on Puyallup agency. Their ancient home is the valley of the Cowlitz river, a northern tributary of the Lower Columbia river. *Soiátlpi*, west of Olympia city. This tribe once included the Kettlefalls Indians. *Nisqualli*, *N'skwódlí*; east of Olympia, on Nisqualli river, settled there in company with the Squaxins, on Puyallup agency. *Clallam*, (*S'Clallum*) on S'Kokomish agency, northwest of Olympia city. Twana, in same locality. *Dwamish*, partly settled on Tulalip sub-agency. *Lummi*, on Nootsak or Lummi river, near the British boundary. This dialect is largely impregnated with Nootka and other foreign elements. The *Shushwap*, *Suwupamuck* or *Southern Atnah* belongs to the Selish stock, but does not extend from middle course of Fraser river and its affluents so far south as to reach American territory. It closely resembles Selish proper. The eastern Selish dialects are: *O'Kinakane* (*Okanagan*), with the subdialect *S'lakam*, on Okanagan river, a northern tributary of Upper Columbia river and on Colville reserve, which is located in the northeastern angle of Washington territory. *Kullespelm*, *Kallispelm*, or Pend d'Oreille of Washington territory, on Pend d'Oreille river and Lake Callispelm. The Upper Pend d'Oreille are settled on Flathead or Jocko reservation, Montana. *Spokane*, on Col-

ville reserve and vicinity; three subdialects; Sngomenei, Snpoil-schi, Syk'eszilui. *Skitsuish* or Coeur d'Alène; on a reservation in northern Idaho. *Selish* proper or Flathead. The tribe speaking it resides on Flathead reservation, and is called so without any apparent deformity of the head. The dialect lacks the sounds b, d, f, r; it has been studied by a missionary, Rev. Gregory Mengarini, who at present is writing a second edition of his *Grammatical linguæ Selicæ*; the first edition was published in New York, 1861 (in Shea's Linguistics). *Piskwaus* or *Piskwas*, on middle Columbia river and on Yákima reservation, Washington territory.

NOOTKA.—The only dialect of this stock spoken within the limits of the United States is that of the *Makah*, *Classet* or *Klaiz-zah*t tribe in Neah bay, near Cape Flattery. The Smithsonian Institution published in 1869 a very elaborate ethnological sketch of this fisher-tribe, written by James G. Swan. Nootka dialects are mainly in use on Vancouver's island, which is divided in four areas of totally different families of languages.

KOOTENAI.—The Kootenai, Kitunaha, or Flatbow language is spoken on Kootenay river, an important tributary of Upper Columbia river, draining some remote portions of Idaho, Montana and the British possessions. A Lord's prayer in Kootenai is given in Bancroft's *Native Races*, vol. III, p. 620.

In bestowing the greatest care and accuracy on the composition of this topographical survey of Pacific languages, my principal purpose was to give a *correct division*, of the idioms into stocks, and their dialects and subdialects, and I shall be very grateful for suggestions correcting my statements, if any should be found erroneous. To have given another location for a tribe than the one it occupies at present, cannot be considered as a grave error, for many American tribes are nomadic, and shift constantly from one prairie, pasture or fishing place to another, or are removed to distant reservations by government agents. For want of information, I was unable to classify the Hhána in Sacramento valley, the Hagnaggi on Smith river, California, the Chitwout or Similkameen on the British-American border, and a few other

tongues; but, in spite of this, I presume that the survey will be useful for orientation on this linguistic field, where confusion has reigned supreme for so many generations.

For the better guidance of students in ethnology and linguistics, I propose to classify all the Indian dialects in a very simple and clear manner, by adding to their dialect name that of the stock or family, as it is done in zoölogy and botany with the genera and species. In the same manner as the Mescaleros and Lipans are called Mescalero-Apaches and Lipan-Apaches, we can form compound names, as: Warm-Spring Sahaptin Piskwaus Selish, Watylála Chinook, Kwalhioqua Tinné, Hoopa Tinné, Dowpum Wintoon, Gallinomero Pomo, Coconoon Yocut, Kizh Shoshoni (or Kizh Kauvuya), Comoyei Yuma, Ottare Cherokee, Séneca Iroquois, Abnáki Algónkin, Delaware Algonkin, and so forth. The help afforded to linguistic topography by this method would be as important as the introduction of Linnean terminology was to descriptive natural science, for genera and species exist in human speech as well as among animals and plants.

The *thorough* study of *one* Indian tongue is the most powerful incentive to instructive and capable travelers for collecting as much linguistic material as possible, and as accurately as possible, chiefly in the shape of texts and their translations. It is better to collect little information accurately, than much information of an unreliable nature. The signs used for emphasizing syllables, for nasal and softened vowels, for explosive, lingual, croaking, and other consonantic sounds, must be noted and explained carefully; and the whole has to be committed to such publishers or scientific societies as are *not in the habit* of procrastinating publications. Stocks and dialects become rapidly extinct in the west, or get hopelessly mixed, through increased inter-tribal commerce, so that the original shape, pronunciation and inflection can no longer be recognized with certainty. The work must be undertaken in no distant time by zealous men, for after "the last of the Mohicans" will have departed this life, there will be no means left for us to study the most important feature of a tribe — its language — if it has not been secured in time by alphabetical notation.